

CLAIMS

1. An exhaust gas treatment method for treating exhaust gas containing at least one harmful gas component selected from the group consisting of organometallic gas, metal hydride gas and halide gas; wherein, at least a portion of the exhaust gas is made in an excited state, and is reacted with a reaction remover containing a calcium compound under reduced pressure.
2. The exhaust gas treatment method according to claim 1, wherein the exhaust gas is reacted with the reaction remover in the presence of oxygen.
3. The exhaust gas treatment method according to claim 1, wherein the exhaust gas is reacted with a reaction remover in the form of a viscous flow.
4. The exhaust gas treatment method according to claim 1, wherein at least a portion of the exhaust gas is put into the excited state by plasma and/or ultraviolet light.
5. The exhaust gas treatment method according to claim 1, wherein the exhaust gas contains xenon and/or krypton.
6. The exhaust gas treatment method according to claim 1, wherein the reaction remover contains calcium oxide and/or calcium hydroxide.
7. The exhaust gas treatment method according to claim 1, wherein the harmful gas component is a hydride or halide of an element oxide of which is a solid.

8. An exhaust gas treatment apparatus for treating exhaust gas containing at least one harmful gas component selected from the group consisting of organometallic gas, metal hydride gas and halide gas, comprising: a first exhaust pump for reducing the pressure of the exhaust gas, a second exhaust pump for reducing the pressure of the exhaust gas, an excitation unit arranged between the first exhaust pump and the second exhaust pump for putting the exhaust gas into an excited state, and a reaction removal unit containing a reaction remover for removing the harmful gas component by reacting with the harmful gas component present in exhaust gas discharged from the excitation unit.

9. The exhaust gas treatment apparatus according to claim 8, wherein an oxygen supply unit for supplying oxygen is arranged in the excitation unit.

10. The exhaust gas treatment apparatus according to claim 8, wherein the excitation unit is composed of a plasma device and/or an ultraviolet radiation device.

11. The exhaust gas treatment apparatus according to claim 8, wherein the reaction remover is composed of calcium oxide and/or calcium hydroxide.